

MIDDLEBURG

Agricultural Research and Extension Center



Robin White, an assistant professor of animal and poultry sciences, shows a young rider how biosensors can be used to determine fitness in horses.

Working with industry partners, scientists at the MARE Center are engaged in the development of novel forages and nutritional strategies that improve the metabolic health and performance of horses.

The One Horse approach integrates exercise, diet, and disease prevention into a tailored program for individual athletes while maintaining a keen eye toward the health and sustainability of the land. Our work at the nexus of stewardship, nutrition, and health allows us to offer unique educational programs for both stakeholders and students.

Current research funded through a joint NSF-USDA venture seeks to couple technology with biological sensing to help inform decision making.

“MARE is an ideal setting to test these novel tools because of its rural location that is in close proximity to the technology district,” Robin White, an assistant professor of animal and poultry sciences.

PARTNER WITH US

5527 Sullivans Mill Road, Middleburg VA 20117

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www.ares.vaes.vt.edu/ares/middleburg/

 MARECenter



“An advantage of the MARE Center is our ability to translate laboratory results directly into real-world settings. As an established equine facility, the center is a collaborative hub for transdisciplinary teams in animal science, engineering, and computing technologies.”

SALLY JOHNSON
PAUL MELLON DISTINGUISHED
CHAIR OF AGRICULTURE



The MARE Center provides excellent outdoor classroom areas allowing us to partner with LSWCD and USDA-NRCS for field days and workshops. Students of all ages engage in hands-on planting of native trees, shrubs and grasses to create vegetative buffers along stream corridors.

MIDDLEBURG AREC AT A GLANCE



DISCIPLINES

- Equine nutrition and exercise physiology
- Equine health and disease
- Animal behavior and psychology
- Ecosystem management
- Biodevice design

INNOVATIVE TECHNOLOGIES

- Smart apps for nutrition and exercise decisions
- The best management practices living laboratory
- Pasture grasses for water and carbon sequestration

FACILITIES

- 420 acres
- Exercise and nutrition barns
- Nature trail and conservation area
- Office building and conference room

INDUSTRY PARTNERS

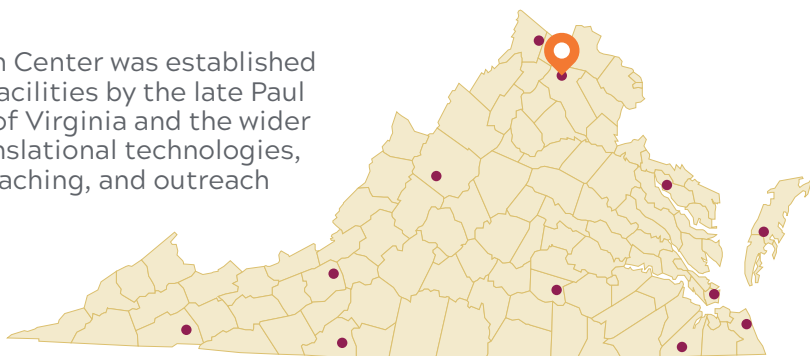
- Equine nutritionists
- Conservation groups
- Grassland and forage specialists

ABOUT THE MIDDLEBURG AREC

The Middleburg Agricultural Research and Extension Center was established in 1949 through the generous donation of land and facilities by the late Paul Mellon. Our mission is to provide the stakeholders of Virginia and the wider equestrian community with innovative research, translational technologies, and state-of-the-art education through research, teaching, and outreach efforts.

A COLLABORATIVE NETWORK

The ARECs are a network of 11 centers strategically located throughout the state that emphasize close working relationships between Virginia Agricultural Experiment Station, Virginia Cooperative Extension, and the industries the work with. The mission of the system is to engage in innovative, leading-edge research to discover new scientific knowledge and create and disseminate science-based applications that ensure the wise use of agricultural, natural, and community resources while enhancing quality of life.



Virginia Cooperative Extension programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, veteran status, or any other basis protected by law. An equal opportunity/affirmative action employer. Issued in furtherance of Cooperative Extension work, Virginia Polytechnic Institute and State University, Virginia State University, and the U.S. Department of Agriculture cooperating. Edwin J. Jones, Director, Virginia Cooperative Extension, Virginia Tech, Blacksburg; M. Ray McKinnie, Administrator, 1890 Extension Program, Virginia State University, Petersburg



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